

Application No. 10/734,123

In the claims:

1. (currently amended) A hip joint prosthesis comprising:

a replacement ligamentum teres femoris non-slidingly attached to a replacement femoral head.

2. (canceled)

3. (original) The prosthesis according to claim 1, further comprising a replacement acetabular structure to which said replacement ligamentum teres femoris is attached.

4. (original) The prosthesis according to claim 1, wherein said replacement ligamentum teres femoris comprises one attachment zone for attachment to a femoral head and at least one attachment zone to acetabular structure.

5. (currently amended) The prosthesis according to claim 1-2, wherein said replacement ligamentum teres femoris extends outwards from a portion of said replacement femoral head corresponding to a fovea of a natural femoral head.

6. (currently amended) The prosthesis according to claim 12, wherein said replacement femoral head extends from a stem insertable into a femur.

7. (original) The prosthesis according to claim 6, wherein said stem comprises an alignment device adapted to orient said replacement femoral head in a predefined orientation.

8. (original) The prosthesis according to claim 1, wherein said replacement ligamentum teres femoris is stretchable.

9. (new) The prosthesis according to claim 1, wherein said replacement ligamentum teres femoris does not pass through said replacement femoral head.